Docket No. 0229-0785P Appl. No. 10/725,459 Amendment dated May 10, 2005 Reply to Office Action of December 10, 2004 Page 20 of 20

Abstract

A method and device for determining force exerted on a rolling vehicle wheel. Firstly, data on a relationship between a force exerted on a vehicle wheel and a physical parameter such as strain of the radius part of the wheel at predetermined measuring positions are obtained. Using the obtained data on the relationship, a formula for the force is made. Then, the vehicle wheel is measured for the physical parameter during rolling, and using the measured physical parameter and formula, the force is calculated. The force may be a vertical force, lateral force, longitudinal force or self aligning torque. The physical parameter may be the magnitude of a radial strain.